



May 12, 2017

## Public Health Preparedness and Situational Awareness Report: #2017:18 Reporting for the week ending 5/06/17 (MMWR Week #18)

### CURRENT HOMELAND SECURITY THREAT LEVELS

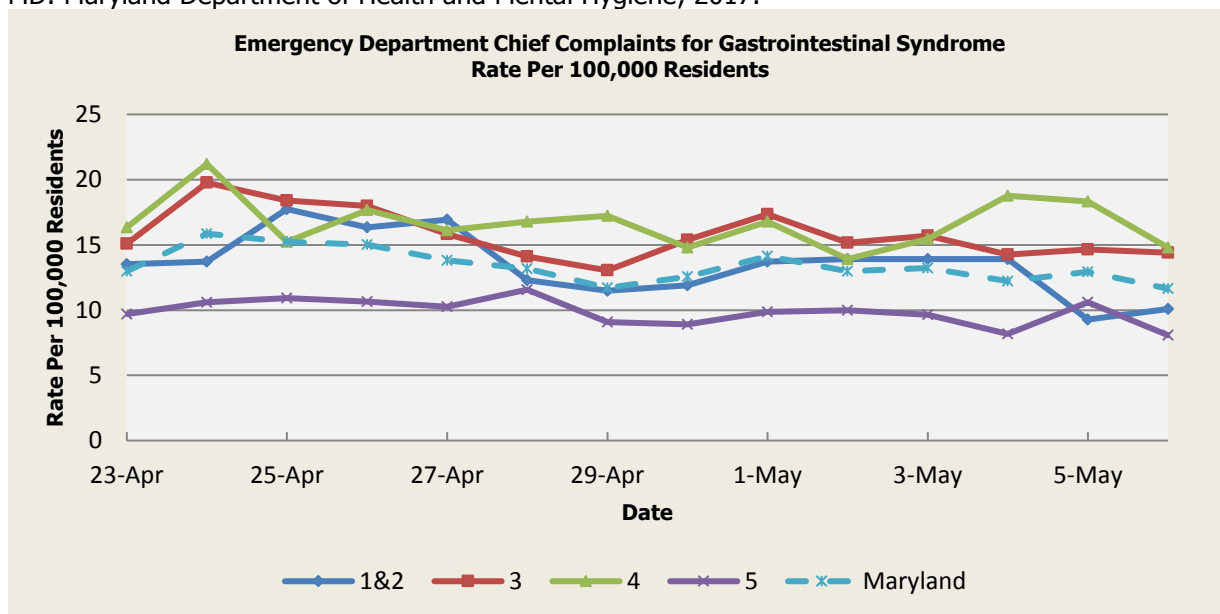
National: No Active Alerts

Maryland: Level Four (MEMA status)

### SYNDROMIC SURVEILLANCE REPORTS

#### **ESSENCE (Electronic Surveillance System for the Early Notification of Community-based Epidemics):**

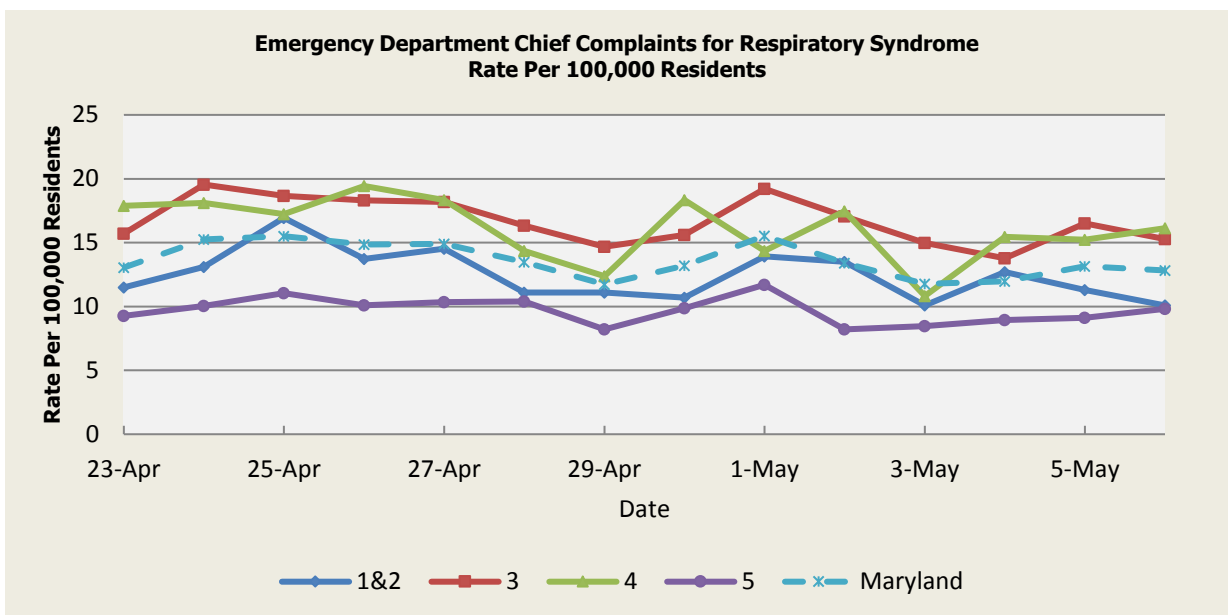
Graphical representation is provided for all syndromes (excluding the "Other" category; see Appendix 1) by Health and Medical Regions (See Appendix 2). Emergency department chief complaint data is presented as rates per 100,000 residents using data from the 2010 census. Electronic Surveillance System for the Early Notification of Community-Based Epidemics (ESSENCE). Baltimore, MD: Maryland Department of Health and Mental Hygiene; 2017.



There was one (1) Gastrointestinal Syndrome outbreak reported this week: one (1) outbreak of Gastroenteritis associated with a Daycare Center (Region 3).

Gastrointestinal Syndrome Baseline Data January 1, 2010 - Present					
Health Region	1&2	3	4	5	Maryland
Mean Rate*	12.88	15.07	15.39	10.28	13.08
Median Rate*	12.91	14.80	15.02	10.22	12.95

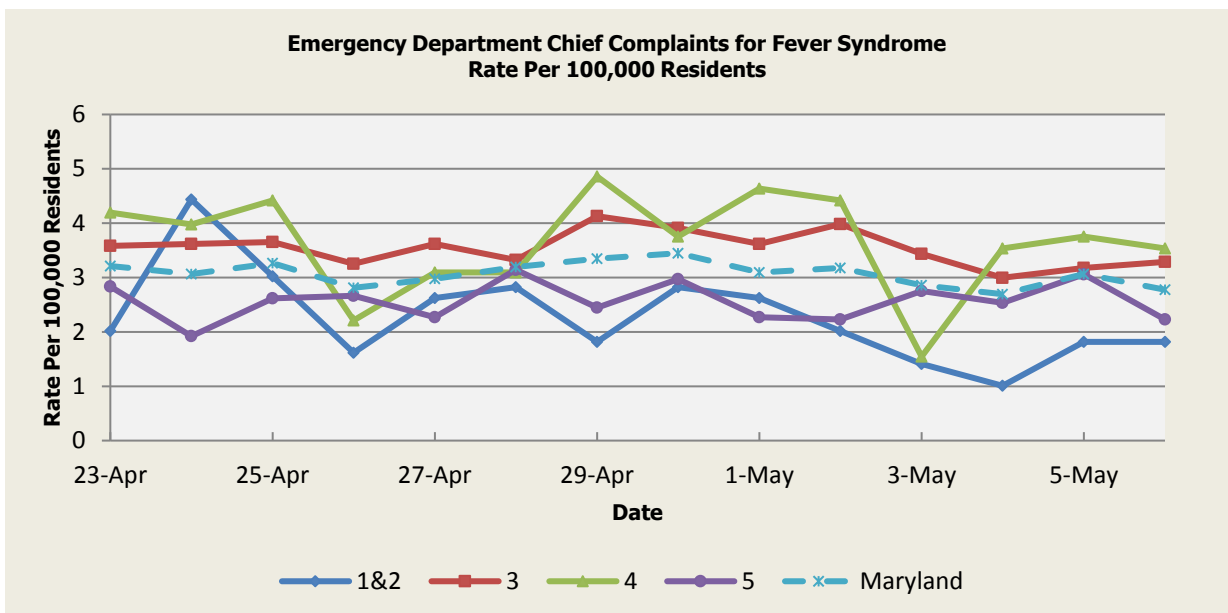
\* Per 100,000 Residents



There was one (1) Respiratory Syndrome outbreaks reported this week: one (1) outbreak of Pneumonia in a Nursing Home (Region 3).

Respiratory Syndrome Baseline Data January 1, 2010 - Present					
Health Region	1&2	3	4	5	Maryland
Mean Rate*	12.02	14.42	14.31	9.94	12.49
Median Rate*	11.70	13.88	13.91	9.65	12.05

\* Per 100,000 Residents

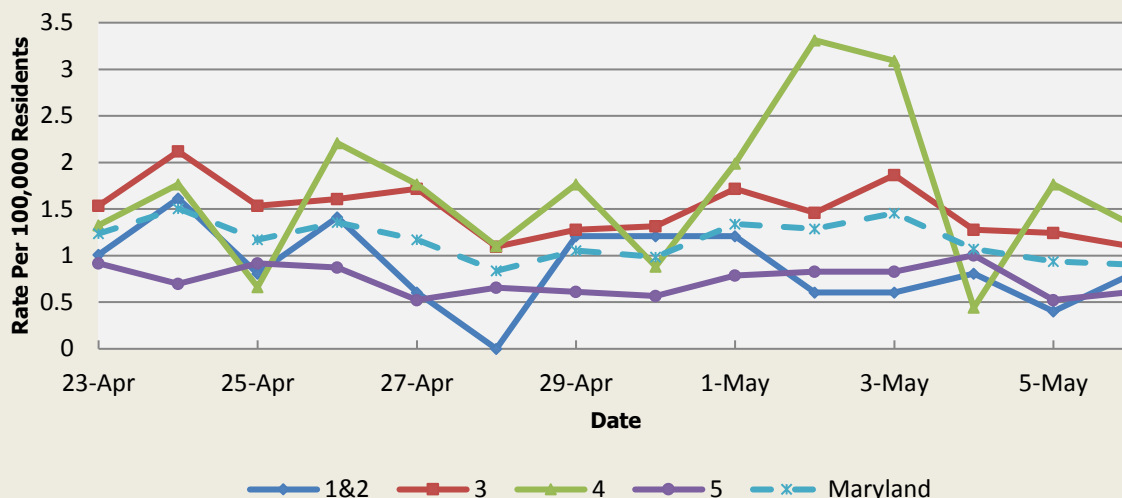


There were no Fever Syndrome outbreaks reported this week.

Fever Syndrome Baseline Data January 1, 2010 - Present					
Health Region	1&2	3	4	5	Maryland
Mean Rate*	3.02	3.86	3.97	3.07	3.50
Median Rate*	2.82	3.76	3.75	2.97	3.40

Per 100,000 Residents

### Emergency Department Chief Complaints for Localized Lesion Syndrome Rate Per 100,000 Residents



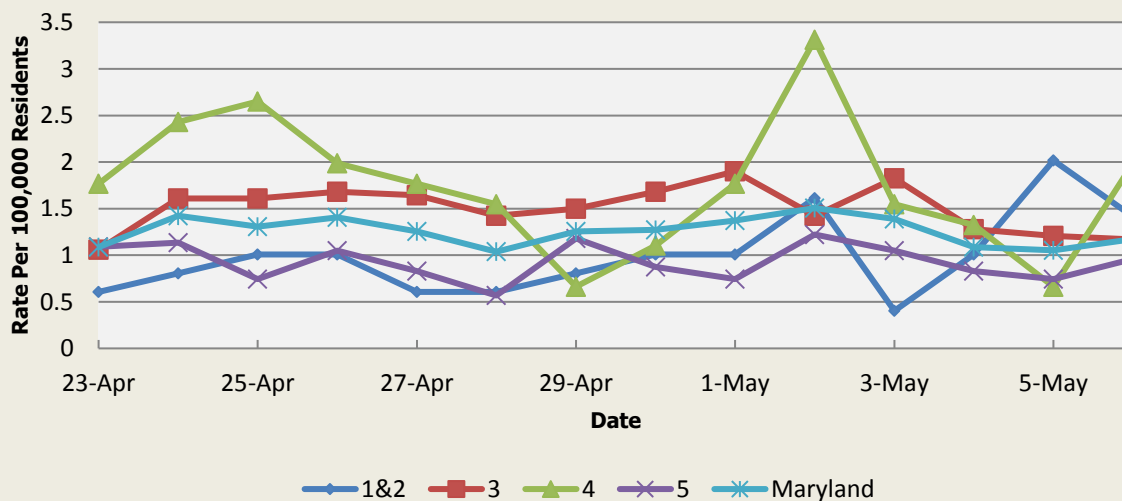
There were no Localized Lesion Syndrome outbreaks reported this week.

#### Localized Lesion Syndrome Baseline Data January 1, 2010 - Present

Health Region	1&2	3	4	5	Maryland
Mean Rate*	1.04	1.89	2.02	0.96	1.47
Median Rate*	1.01	1.83	1.99	0.92	1.42

\* Per 100,000 Residents

### Emergency Department Chief Complaints for Rash Syndrome Rate Per 100,000 Residents



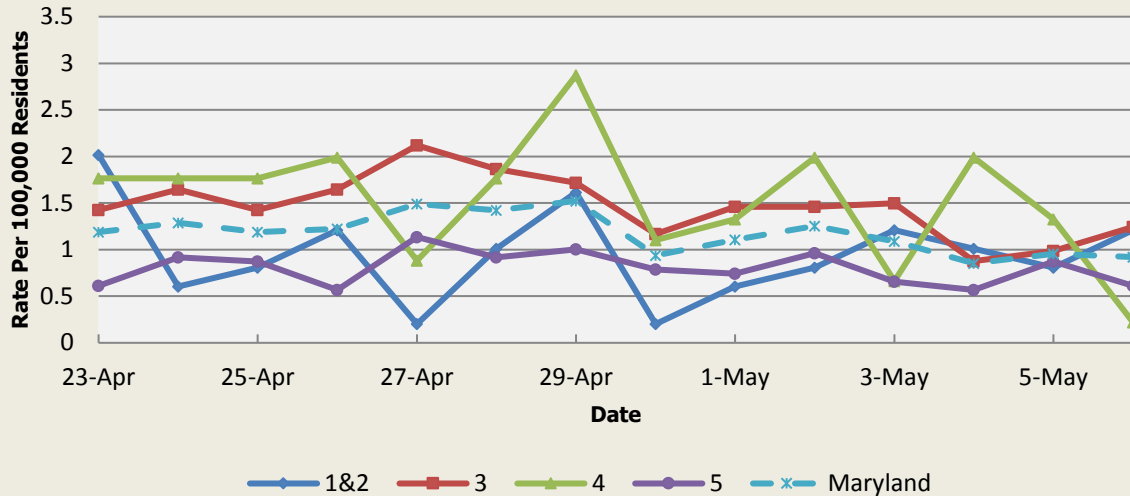
There were three (3) Rash Syndrome outbreaks reported this week: one (1) outbreak of Hand, Foot, and Mouth Disease associated with a Daycare Center (Region 4); one (1) outbreak of Scabies in a Nursing Home (Regions 1&2), and one (1) outbreak of Scabies in An Assisted Living Facility (Region 3).

#### Rash Syndrome Baseline Data January 1, 2010 - Present

Health Region	1&2	3	4	5	Maryland
Mean Rate*	1.24	1.75	1.76	1.03	1.43
Median Rate*	1.21	1.68	1.77	1.00	1.39

\* Per 100,000 Residents

### Emergency Department Chief Complaints for Neurological Syndrome Rate Per 100,000 Residents



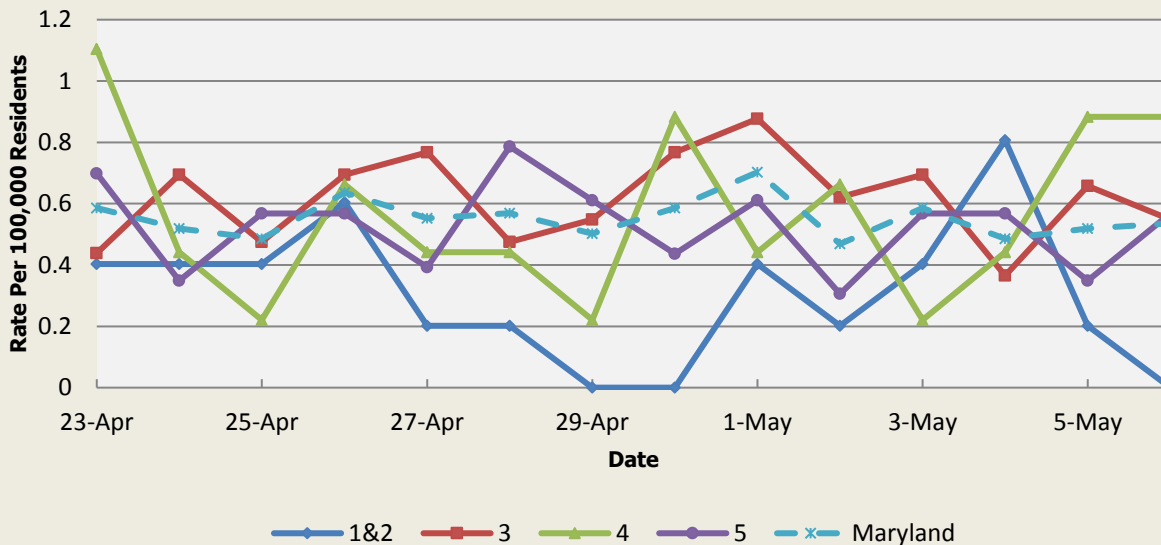
There were no Neurological Syndrome outbreaks reported this week.

#### Neurological Syndrome Baseline Data January 1, 2010 - Present

Health Region	1&2	3	4	5	Maryland
Mean Rate*	0.65	0.79	0.68	0.51	0.66
Median Rate*	0.60	0.69	0.66	0.48	0.59

\* Per 100,000 Residents

### Emergency Department Chief Complaints for Severe Illness or Death Syndrome Rate Per 100,000 Residents



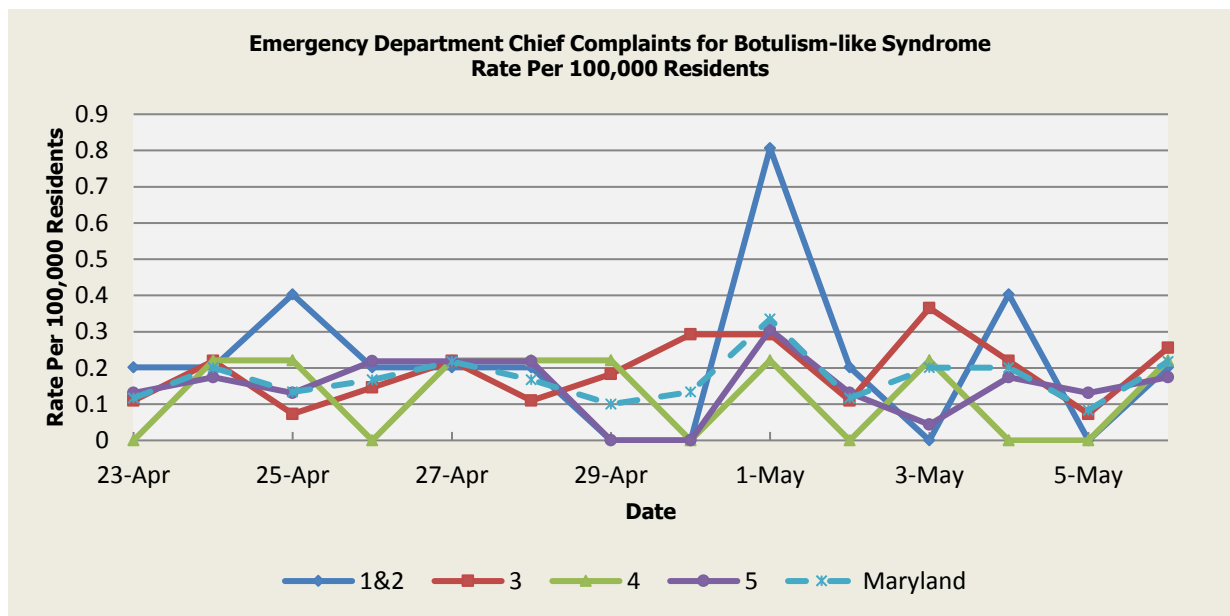
There were no Severe Illness or Death Syndrome outbreaks reported this week.

#### Severe Illness or Death Syndrome Baseline Data January 1, 2010 - Present

Health Region	1&2	3	4	5	Maryland
Mean Rate*	0.65	0.92	0.81	0.46	0.71
Median Rate*	0.60	0.91	0.66	0.44	0.70

\* Per 100,000 Residents

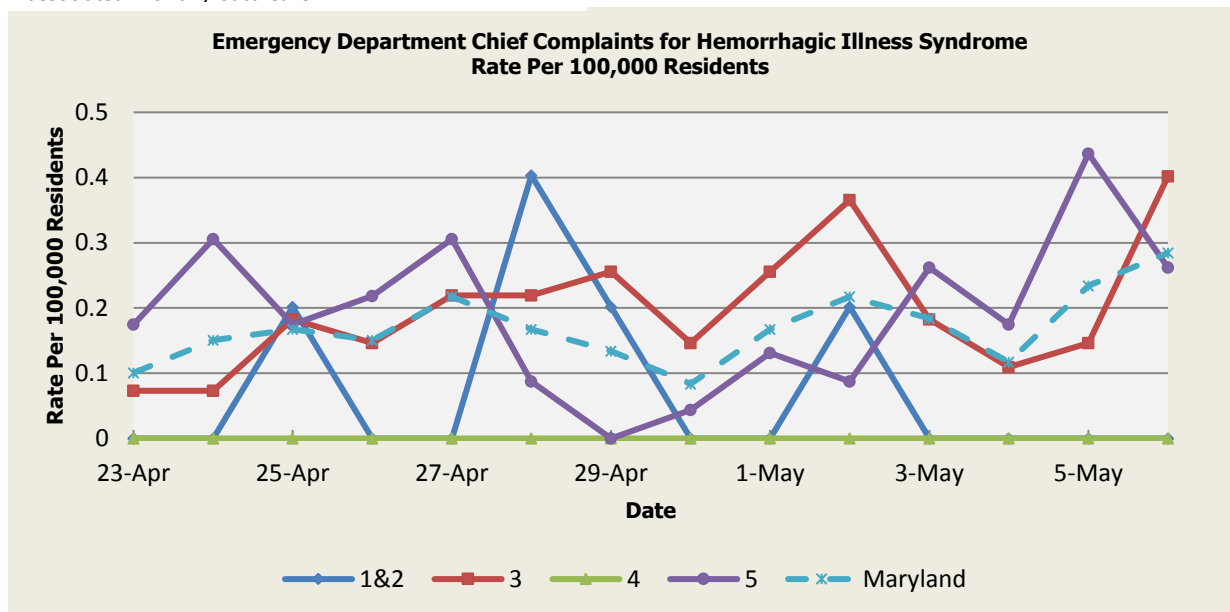
## SYNDROMES RELATED TO CATEGORY A AGENTS



There was an appreciable increase above baseline in the rate of ED visits for Botulism-like Syndrome on 04/23 (Regions 1&2,5), 04/24 (Regions 1&2,3,4,5), 04/25 (Regions 1&2,4,5), 04/26 (Regions 1&2,5), 04/27 (Regions 1&2,3,4,5), 04/28 (Regions 1&2,4,5), 04/29 (Regions 3,4), 04/30 (Region 3), 05/01 (Regions 1&2,3,4,5), 05/02 (Regions 1&2,5), 05/03 (Regions 3,4), 05/04 (Regions 1&2,3,5), 05/05 (Region 5), 05/06 (Regions 1&2,3,4). These increases are not known to be associated with any outbreaks.

Botulism-like Syndrome Baseline Data January 1, 2010 - Present					
Health Region	1&2	3	4	5	Maryland
Mean Rate*	0.06	0.09	0.04	0.06	0.07
Median Rate*	0.00	0.07	0.00	0.04	0.05

\* Per 100,000 Residents

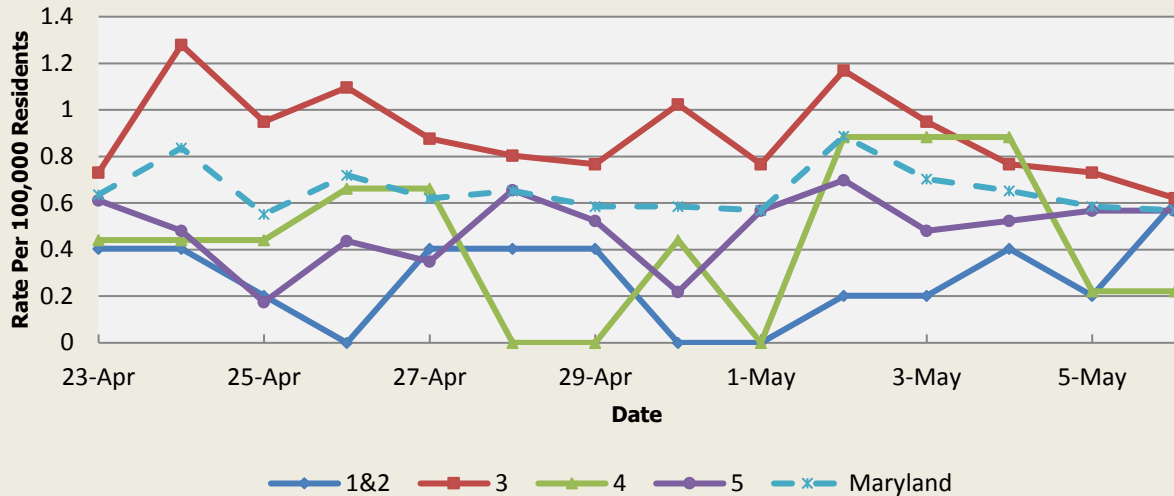


There was an appreciable increase above baseline in the rate of ED visits for Hemorrhagic Illness Syndrome on 04/24 (Region 5), 04/25 (Regions 1&2), 04/26 (Region 5), 04/27 (Region 5), 04/28 (Regions 1&2), 04/29 (Regions 1&2), 05/02 (Regions 1&2,3), 05/03 (Region 5), 05/05 (Region 5), 05/06 (Regions 3,5). These increases are not known to be associated with any outbreaks.

Hemorrhagic Illness Syndrome Baseline Data January 1, 2010 - Present					
Health Region	1&2	3	4	5	Maryland
Mean Rate*	0.03	0.1	0.03	0.09	0.10
Median Rate*	0.00	0.04	0.00	0.04	0.05

\* Per 100,000 Residents

### Emergency Department Chief Complaints for Lymphadenitis Syndrome Rate Per 100,000 Residents



There was an appreciable increase above baseline in the rate of ED visits for Lymphadenitis Syndrome on 04/24 (Region 3), 04/26 (Region 3), 04/28 (Region 5), 04/30 (Region 3), 05/02 (Regions 3,4,5), 05/03 (Region 4), 05/04 (Region 4). These increases are not known to be associated with any outbreaks.

#### Lymphadenitis Syndrome Baseline Data January 1, 2010 - Present

Health Region	1&2	3	4	5	Maryland
Mean Rate*	0.31	0.52	0.35	0.32	0.41
Median Rate*	0.20	0.40	0.22	0.26	0.33

\* Per 100,000 Residents

### MARYLAND REPORTABLE DISEASE SURVEILLANCE

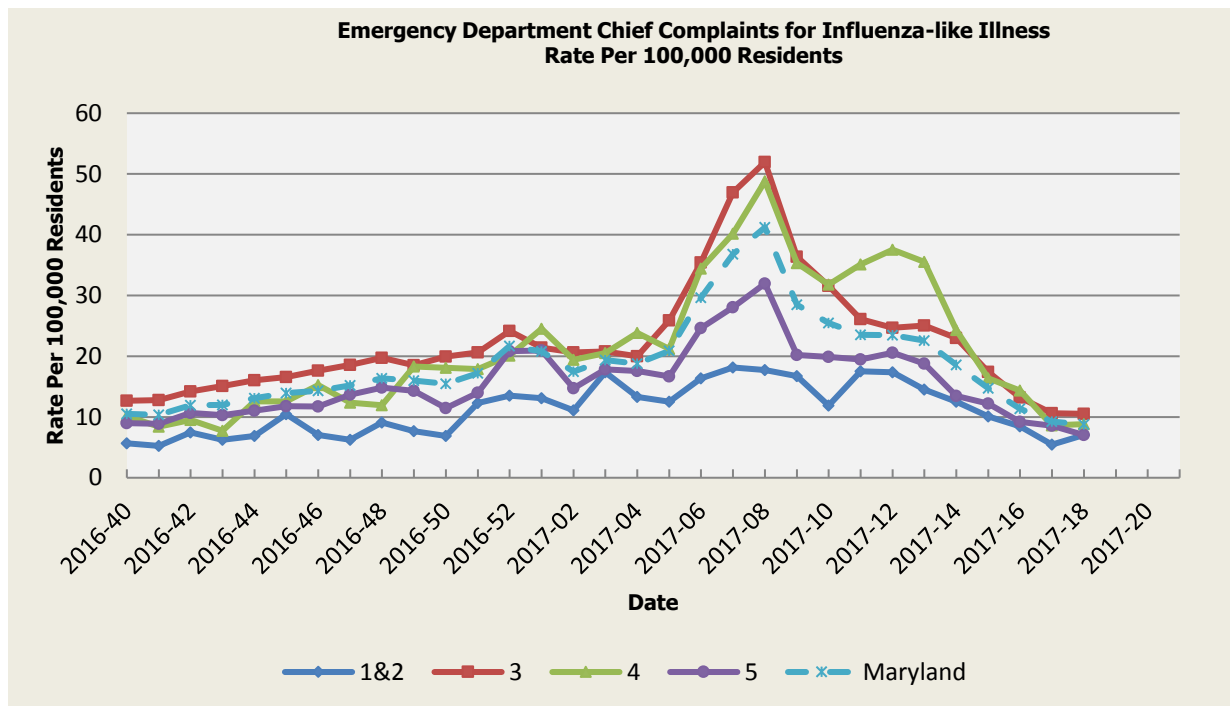
Condition	Counts of Reported Cases†					
	May			Cumulative (Year to Date)**		
Vaccine-Preventable Diseases	2017	Mean*	Median*	2017	Mean*	Median*
Aseptic meningitis	3	7.2	6	81	125	122
Meningococcal disease	0	0	0	2	2.8	2
Measles	0	0	0	1	2.6	1
Mumps	0	0.2	0	15	27.6	4
Rubella	0	0	0	1	2	2
Pertussis	0	5	6	66	103.2	101
Foodborne Diseases	2017	Mean*	Median*	2017	Mean*	Median*
Salmonellosis	8	12.6	11	175	211.4	200
Shigellosis	2	3.4	1	66	65.6	71
Campylobacteriosis	6	11.6	12	195	196.4	203
Shiga toxin-producing Escherichia coli (STEC)	2	2.2	2	39	35	33
Listeriosis	0	0.2	0	8	3	3
Arboviral Diseases	2017	Mean*	Median*	2017	Mean*	Median*
West Nile Fever	0	0.4	0	0	1	0
Lyme Disease	35	53.2	46	697	614	524
Emerging Infectious Diseases	2017	Mean*	Median*	2017	Mean*	Median*
Chikungunya	0	0	0	0	1.6	0
Dengue Fever	0	0.2	0	4	8.2	7
Zika Virus***	0	0.4	0	1	3.6	1
Other	2017	Mean*	Median*	2017	Mean*	Median*
Legionellosis	0	2.6	2	46	39	37

NEDSS data: Maryland National Electronic Disease Surveillance System (NEDSS). Baltimore, MD: Maryland Department of Health and Mental Hygiene; 2017. † Counts are subject to change \*Timeframe of 2011-2017\*\*Includes January through current month.

\*\*\* As of May 03, 2017, the total [Maryland Confirmed and Probable Cases of Zika Virus Disease and Infection](#) for 2017 is 20.

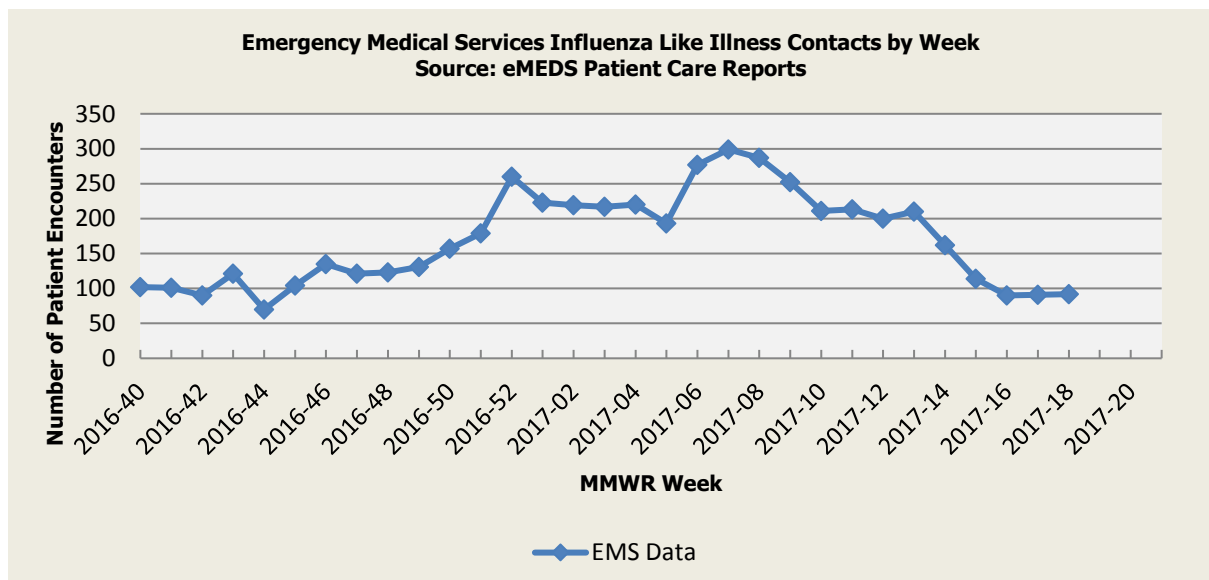
## SYNDROMIC INFLUENZA SURVEILLANCE

Seasonal Influenza reporting occurs from MMWR Week 41 through MMWR Week 20 (October through May). Seasonal Influenza activity for Week 18 was: Sporadic Geographic Spread with Minimal Intensity.



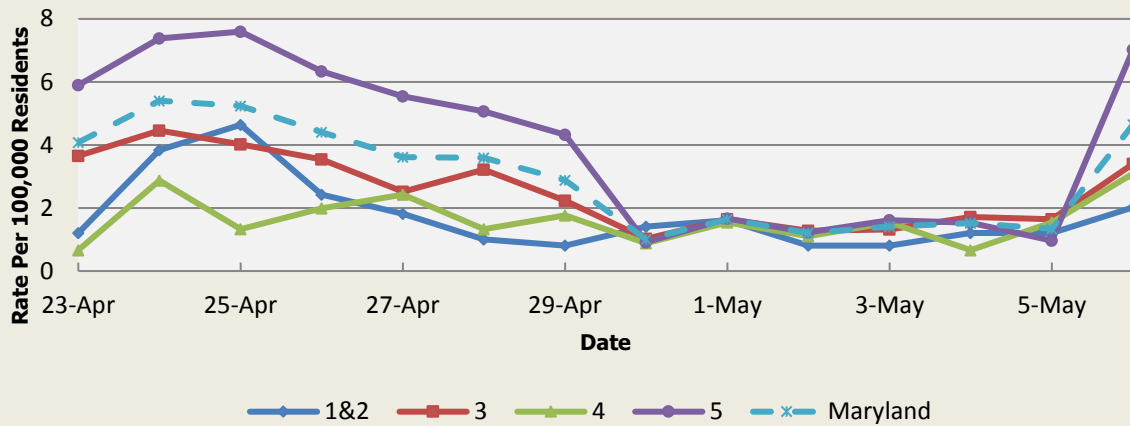
Influenza-like Illness Baseline Data Week 1 2010 - Present					
Health Region	1&2	3	4	5	Maryland
Mean Rate*	207.15	276.66	253.84	239.93	255.09
Median Rate*	7.66	9.63	9.05	8.51	9.00

\* Per 100,000 Residents



**Disclaimer on eMEDS flu related data:** These data are based on EMS Pre-hospital care reports where the EMS provider has selected "flu like illness" as a primary or secondary impression of a patient's illness. This impression is solely based on the signs and symptoms seen by the provider, not on any diagnostic tests. Since these numbers do not include all primary or secondary impressions that may be seen with influenza the actual numbers may be low. These data are reported for trending purposes only.

### Over-the-Counter Medication Sales Related to Influenza Rate Per 100,000 Residents

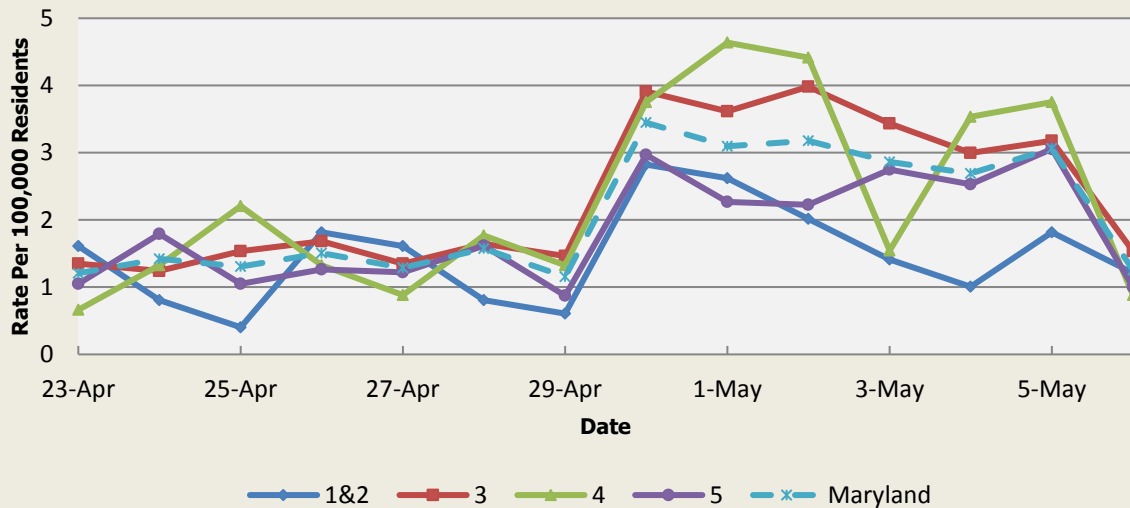


There was not an appreciable increase above baseline in the rate of OTC medication sales during this reporting period.

OTC Sales Baseline Data January 1, 2010 - Present					
Health Region	1&2	3	4	5	Maryland
Mean Rate*	3.77	4.91	2.73	8.45	6.01
Median Rate*	3.23	4.38	2.43	8.03	5.52

\* Per 100,000 Residents

### Over-the-Counter Thermometer Sales Rate Per 100,000 Residents



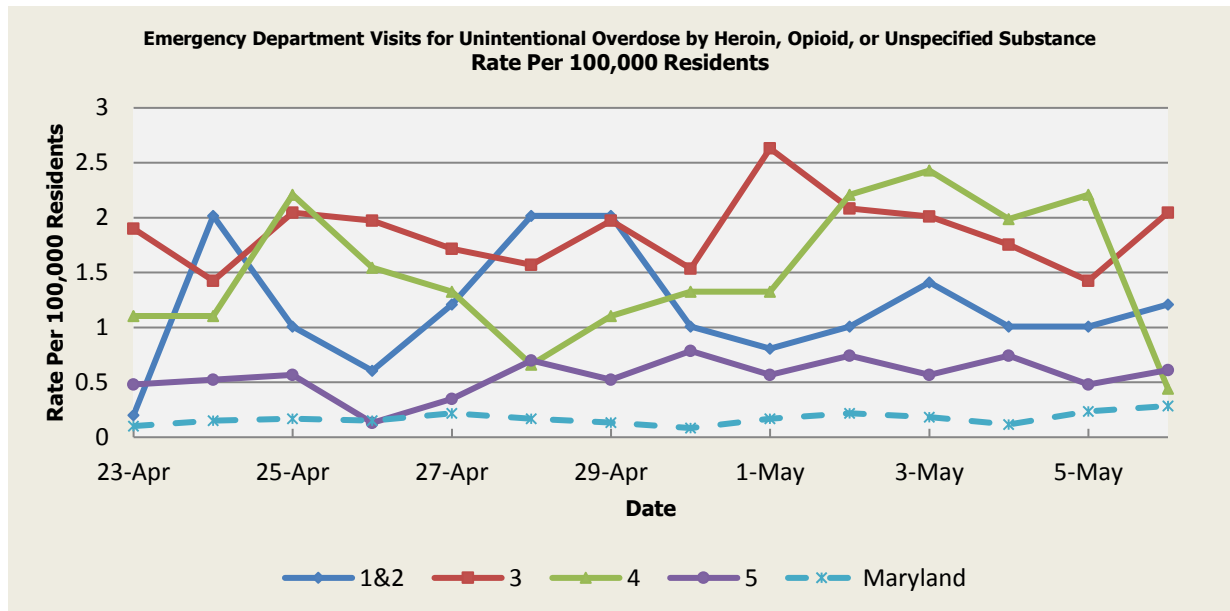
There was not an appreciable increase above baseline in the rate of OTC thermometer sales during this reporting period.

Thermometer Sales Baseline Data January 1, 2010 - Present					
Health Region	1&2	3	4	5	Maryland
Mean Rate*	3.37	3.23	2.50	4.32	3.61
Median Rate*	3.02	3.03	2.43	4.06	3.36

\* Per 100,000 Residents

## SYNDROMIC OVERDOSE SURVEILLANCE

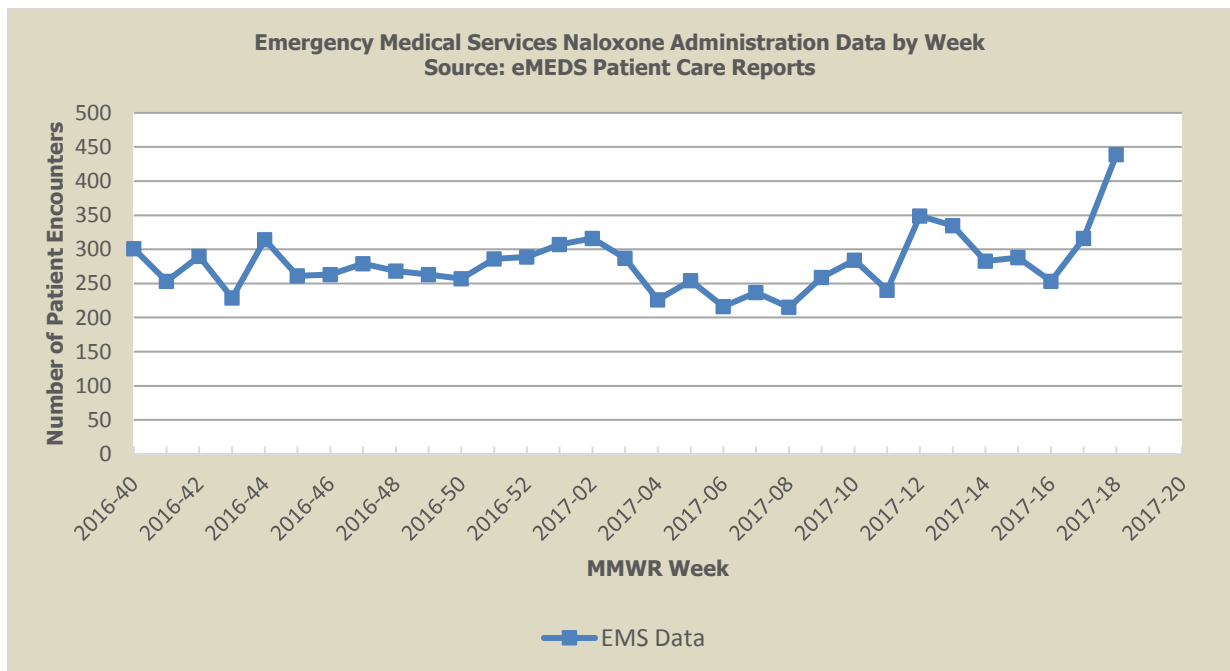
The purpose of this section is to characterize non-fatal ED visit trends for acute unintentional overdose by Heroin, Opioid or Unspecified substance among Maryland residents captured by ESSENCE data, including chief complaint and discharge diagnosis. ED visits that are identified as unintentional overdose by Heroin, Opioid or Unspecified substance include those with medical and non-medical use of a prescription Opioid or where the substance is not specified, given evidence that the majority of fatal overdoses are Opioid-related.



**Disclaimer on ESSENCE Overdose related data:** ESSENCE chief complaint and discharge diagnosis query for overdose-related illness includes but is not limited to the following terms: heroin, opioid, speedball, dope, fentanyl, naloxone, narcan, and overdose.

Non-fatal Overdose ED Visit Baseline Data January 1, 2010 - Present					
Health Region	1&2	3	4	5	Maryland
Mean Rate*	0.33	0.42	0.37	0.15	0.30
Median Rate*	1.01	1.32	1.10	0.48	0.99

\* Per 100,000 Residents



**Disclaimer on eMEDS naloxone administration related data:** These data are based on EMS Pre-hospital care reports where the EMS provider has documented that they administered naloxone. The administration of naloxone is based on the patient's signs and symptoms and not on any diagnostic tests. These data are reported for trending purposes only.

## **PANDEMIC INFLUENZA UPDATE / AVIAN INFLUENZA-RELATED REPORTS**

**WHO update:** The current WHO phase of pandemic alert for avian influenza is ALERT. Currently, the avian influenza H5N1 virus continues to circulate in poultry in some countries, especially in Asia and northeast Africa. This virus continues to cause sporadic human infections with some instances of limited human-to-human transmission among very close contacts. There has been no sustained human-to-human or community-level transmission identified thus far.

Influenza A (H7N9) is one of a subgroup of influenza viruses that normally circulate among birds. Until recently, this virus had not been seen in people. However, human infections have now been detected. As yet, there is limited information about the scope of the disease the virus causes and about the source of exposure. The disease is of concern because most patients have been severely ill. There is no indication thus far that it can be transmitted between people, but both animal-to-human and human-to-human routes of transmission are being actively investigated.

**Alert phase:** This is the phase when influenza caused by a new subtype has been identified in humans. Increased vigilance and careful risk assessment, at local, national and global levels, are characteristic of this phase. If the risk assessments indicate that the new virus is not developing into a pandemic strain, a de-escalation of activities towards those in the interpandemic phase may occur. As of April 20, 2017, the WHO-confirmed global total (2003-2016) of human cases of H5N1 avian influenza virus infection stands at 858, of which 453 have been fatal. Thus, the case fatality rate for human H5N1 is approximately 53%.

### **AVIAN INFLUENZA:**

**HPAI H5N8 AVIAN INFLUENZA (ENGLAND):** 08 May 2017, Restrictions have been put in place around a Lancashire farm after bird flu was detected. The H5N8 strain of avian flu was confirmed in a small backyard flock of chickens at the farm near Thornton-Cleveleys, Lancashire. A 3km [1.9 mi] protection zone and a 10km [6.2 mi] surveillance zone have been put in place around the infected premises to limit the risk of the disease spreading.

A spokeswoman for the Department for Environment, Food and Rural Affairs (DEFRA) said: "The flock is estimated to contain around 30 birds. A number have died and the remaining live birds at the premises are being humanely culled. "A full investigation is under way to determine the source of the infection. Public Health England advises that the risk to public health from the virus is very low and the Food Standards Agency is clear that bird flu does not pose a food safety risk for UK consumers." Read More: <http://www.promedmail.org/post/5016687>

**HPAI H7N9 AVIAN INFLUENZA (CHINA):** 06 May 2017, China has culled 80 000 chickens in the country's north after detecting an outbreak of H7N9 bird flu on a farm of layer hens, said the agriculture ministry on Fri 5 May 2017. A total of 5000 hens on the farm in Xingtai in Hebei province died in late April 2017, said the ministry, and another 8500 hens were infected with the disease. After confirming infection with the H7N9 virus, authorities ordered the culling of 80 057 poultry. Read More: <http://www.promedmail.org/post/5017462>

**HPAI H7N3 AVIAN INFLUENZA (MEXICO):** 05 May 2017, Following active surveillance on-going in Altos de Jalisco area, H7N3 avian influenza virus was isolated in a commercial layer farm. The flock had been vaccinated against the disease 18 weeks beforehand; birds did not show any clinical signs. A 3 km [1.9 miles] outbreak area and a 10 km [6.2 miles] area around the outbreak were established, and 3 other farms from the same company, that are empty, were identified in the area around the outbreak. The farm is under quarantine and the birds were sent to an authorized slaughterhouse near the site. Epidemiological investigation is on-going. Read More: <http://www.promedmail.org/post/5014583>

## **HUMAN AVIAN INFLUENZA:**

**H7N9 AVIAN INFLUENZA (CHINA):** 09 May 2017, A new case of human infection with H7N9 avian influenza has been confirmed in Xianyang City, northwestern China after another patient's death in the city a few days ago. Test results revealed that a 63-year-old man was carrying the virus. The patient was hospitalized on Tue 2 May 2017 in Xianyang, suffering from fever, cough and diarrhea, and was transferred to the provincial capital of Xi'an.

All live poultry markets in Xianyang have been closed, inspected and disinfected. A total of 40 people suspected of having had contact with the patient were isolated. Read More:

<http://www.promedmail.org/post/5019418>

## **NATIONAL DISEASE REPORTS**

**HEPATITIS A (CALIFORNIA):** 11 May 2017, For the past several months, the County of San Diego Health and Human Services Agency has been investigating a local hepatitis A outbreak. The outbreak investigation is ongoing; it has been challenging because of the long incubation period of the disease (15 to 50 days) and the difficulty experienced to contact many individuals sickened with the illness who are homeless. To date, no common source of food, beverage, or other cause has been identified. Read More: <http://www.promedmail.org/post/5028824>

**E. COLI EHEC (CALIFORNIA):** 11 May 2017, Four (4) cases of Shiga toxin (Stx) 1- and 2-producing E. coli O157 infection were reported to a local health department in northern California; investigation revealed a common source of exposure. The case-patients, ranging in age from 1 to 3 years, had played in a stream adjacent to a children's playground within a city park. Exposure of the case-patients to the stream occurred on 3 separate days spanning a 2-week period. 2 case-patients are known to have ingested water while playing in the stream. 2 case-patients were siblings. All case-patients had diarrhea and abdominal cramps; bloody diarrhea was reported for 3. One case-patient was hospitalized with hemolytic uremic syndrome. Read More: <http://www.promedmail.org/post/5028649>

**BOTULISM (CALIFORNIA):** 08 May 2017, Sacramento County Public Health officials are investigating a botulism outbreak after several people who ate prepared food from the Valley Oak Food and Fuel gas station in Walnut Creek contracted the possibly fatal form of food poisoning.

County Public Health Officer Dr Olivia Kasirye said 5 cases are under investigation and the affected people are in serious condition at local hospitals. 4 of the 5 confirmed they'd eaten prepared food from the gas station. Kasirye said the county wants to ensure that anyone who has eaten at the gas station since 23 Apr 2017 and is experiencing botulism symptoms receives immediate medical attention. Read More: <http://www.promedmail.org/post/5021002>

**PERTUSSIS (KANSAS):** 06 May 2017, The number of whooping cough cases in Labette County has grown to 6, with 2 more suspected cases awaiting test results, so the Kansas Department of Health and Environment [KDHE] considers it an outbreak.

The disease was 1st found in a high school student, but most of the recent victims are from middle-school age students at Meadow View Grade School. Public Health of Labette County administrator Debbi Baugher said a 4-month-old infant had been admitted to Labette Health with pertussis. A family member who attends Labette County High School and had been exposed to the disease was in the presence of the infant. The infant was born with respiratory issues and was too young to be fully vaccinated. Read More: <http://www.promedmail.org/post/5017287>

## **INTERNATIONAL DISEASE REPORTS**

**EBOLA (LIBERIA):** 12 May 2017, An Ebola epidemic has been declared in the northeast region of the Democratic Republic of Congo [DRC].

The World Health Organization says 3 deaths are being linked to the virus, and it is taking the situation "very seriously". One of those killed had tested positive for Ebola after coming down with a

hemorrhagic fever last month in Bas-Uele, a province which borders the Central African Republic. Read More: <http://www.promedmail.org/post/5031411>

**HEPATITIS C, THALASSEMIA PATIENTS (INDIA):** 11 May 2017, The Punjab health minister has sought a report from civil surgeon here [Jalandhar, Punjab] in case of at least 35 patients with thalassemia, who tested positive for hepatitis C virus (HCV). These patients, most of whom are below 18, have been receiving blood transfusions at the local civil hospital. Read More: <http://www.promedmail.org/post/5026523>

**MENINGITIS, MENINGOCOCCAL (NIGERIA):** 10 May 2017, Thousands of men, women, and children in northern Nigeria have been affected by a meningitis C outbreak, reportedly the largest to hit the country in the past 9 years.

Almost 6 months after the 1st cases were recorded in Zamfara State, Nigeria's Ministry of Health (MoH) is still struggling to fight this epidemic in 7 states of the country. Médecins Sans Frontières has supported the health authorities with surveillance and case management in the most-affected areas since February [2017], when the outbreak was officially declared. However, the slow reaction of the country and a global shortage of vaccines have hampered the response. Read More: <http://www.promedmail.org/post/5027149>

**HEPATITIS A, MEN WHO HAVE SEX WITH MEN (PORTUGAL):** 10 May 2017, Portugal has until now 242 registered cases of hepatitis A, in an outbreak that began in the beginning of the year.

According to the head of the Viral Hepatitis Program of the General-Directorate for Health, 93 percent of cases occur in men and 57 percent have been confirmed via sexual intercourse. Isabel Aldir also said that most situations (almost 90 percent) occur in people from 18 to 50 years, especially in people aged 18 to 39 years. Read More: <http://www.promedmail.org/post/5026077>

**FOODBORNE ILLNESS (FRANCE):** 08 May 2017, A dodgy batch of smelly French cheese has been blamed for a mass food poisoning outbreak at schools in Normandy. An investigation launched after 300 children fell ill in the town of Rouen named the culprit as gone-off cheese served up by school canteens. Read More: <http://www.promedmail.org/post/5021628>

**CHOLERA (YEMEN):** 08 May 2017, A cholera outbreak in Yemen killed 25 people this week, the WHO said, as 2 years of war continues to wreak havoc on the impoverished country's health and sanitation system. The deaths from the diarrheal disease which is carried in food and water tainted by human feces are among 1360 cases that the United Nations agency reported since 27 Apr 2017. Read More: <http://www.promedmail.org/post/5018280>

## **OTHER RESOURCES AND ARTICLES OF INTEREST**

More information concerning Public Health and Emergency Preparedness can be found at the Office of Preparedness and Response website: <http://preparedness.dhmm.maryland.gov/> or follow us on Facebook at [www.facebook.com/MarylandOPR](http://www.facebook.com/MarylandOPR).

More data and information on influenza can be found on the DHMM website:  
<http://phpa.dhmm.maryland.gov/influenza/fluwatch/Pages/Home.aspx>

Please participate in the Maryland Resident Influenza Tracking System (MRITS): <http://flusurvey.dhmm.maryland.gov>  
\*\*\*\*\*

**NOTE:** This weekly review is a compilation of data from various surveillance systems, interpreted with a focus on a potential BT event. It is not meant to be inclusive of all epidemiology data available, nor is it meant to imply that every activity reported is a definitive BT event. International reports of outbreaks due to organisms on the CDC Critical Biological Agent list will also be reported. While not "secure", please handle this information in a professional manner. Please feel free to distribute within your organization, as you feel appropriate, to other professional staff involved in emergency preparedness and infection control.

For questions about the content of this review or if you have received this and do not wish to receive these weekly notices, please e-mail us. If you have information that is pertinent to this notification process, please send it to us to be included in the routine report.

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## Appendix 1: ESSENCE Syndrome Definitions and Associated Category A Conditions

Syndrome	ESSENCE Definition	Category A Conditions
Botulism-like	(Botulism or (DifficultyFocusing and DifficultySpeaking) or (DifficultySpeaking and DifficultySwallowing) or (DifficultySwallowing and DifficultyFocusing) or DoubleVision or FacialParalysis or GuillainBarre or Ptosis) and not GeneralExclusions	Botulism
Fever	(Chills or (FeverPlus and (Drowsiness or Seizure)) or FeverOnly or SepsisGroup or ViralSyndrome) and not GeneralExclusions	N/A
Gastrointestinal	(AbdominalCramps or AbdominalPainGroup or Diarrhea or FoodPoisoning or Gastroenteritis or GIBleeding or Peritonitis or Vomiting) and not (GeneralExclusions or Gynecological or Obstetric or Reproductive or UrinaryTract)	Anthrax (gastrointestinal)
Hemorrhagic Illness	(FeverOrChills and (AcuteBloodAbnormalitiesGroup or BleedingFromMouth or BleedingGums or GIBleeding or Hematemesis or Hemoptysis or Nosebleed or Petechiae or Purpura)) and not GeneralExclusions	Viral Hemorrhagic Fever
Localized Lesion	(Boils or Bump or Carbuncle or DepressedUlcer or Eschar or Furuncle or InsectBite or SkinAbscess or (SkinSores and not AllOverBody) or SkinUlcer or SpiderBite) and not (GeneralExclusions or Decubitus or Diabetes or StasisUlcer)	Anthrax (cutaneous) Tularemia
Lymphadenitis	(BloodPoisoning or Bubo or CatScratchDisease or SwollenGlands) and not GeneralExclusions	Plague (bubonic)
Neurological	(([Age<75] and AlteredMentalStatus) or (FeverPlus and (Confusion or Drowsiness or Petechiae or StiffNeck)) or Delirium or Encephalitis or Meningitis or UnconsciousGroup) and not GeneralExclusions	N/A
Rash	(ChickenPox or Measles or RashGeneral or Roseola or (Rubella and not Pregnancy) or Shingles or (SkinSores and AllOverBody) or Smallpox) and not GeneralExclusions	Smallpox
Respiratory	(Anthrax or Bronchitis or (ChestPain and [Age<50]) or Cough or Croup or DifficultyBreathing or Hemothorax or Hypoxia or Influenza or Legionnaires or LowerRespiratoryInfection or Pleurisy or Pneumonia or RespiratoryDistress or RespiratoryFailure or RespiratorySyncytialVirus or RibPain or ShortnessOfBreath or Wheezing) and not (GeneralExclusions or Cardiac or (ChestPain and Musculoskeletal) or Hyperventilation or Pneumothorax)	Anthrax (inhalational) Tularemia Plague (pneumonic)
Severe Illness or Death	CardiacArrest or CodeGroup or DeathGroup or (Hypotension and FeverPlus) or RespiratoryArrest or SepsisGroup or Shock	N/A

## Appendix 2: Maryland Health and Medical Region Definitions

Health and Medical Region	Counties Reporting to ESSENCE
Regions 1 & 2	Allegany County Frederick County Garrett County Washington County
Region 3	Anne Arundel County Baltimore City Baltimore County Carroll County Harford County Howard County
Region 4	Caroline County Cecil County Dorchester County Kent County Queen Anne's County Somerset County Talbot County Wicomico County Worcester County
Region 5	Calvert County Charles County Montgomery County Prince George's County St. Mary's County

